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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Goran Sundholm

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LADAS & PARRY LLP
26 WEST 61ST STREET
NEW YORK, NY 10023

EXAMINER

HARP, WILLIAM RAY

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,302	Applicant(s) SUNDHOLM, GORAN	
	Examiner William R. Harp	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the amendment to the claims entered February 17, 2009 in response to a Non-final Office Action mailed October 14, 2008.
2. Claims 1-22 are pending. Claim(s) 1-22 is/are currently amended. The previously presented claim objections are hereby withdrawn.
3. The previously presented claim rejections under 35 U.S.C. 112 are hereby withdrawn.
4. Examiner acknowledges the amendment to the specification entered February 17, 2009 in response to a Non-final Office Action mailed October 14, 2008. The objections to the specification and to the drawing are hereby withdrawn.

Response to Arguments

5. Applicant's arguments filed February 17, 2009 have been fully considered but they are not persuasive. Applicant argues, on Page 13, that none of the previously cited references (Tolman, EP 1179682, and Morohashi) teaches using a second medium to intensify the suction effect of the ejector. The examiner contends that injecting a second medium into an ejector (taught by the '682 reference) would inherently increase the suction effect of the ejector. The fact that references fail to recognize the effect is immaterial. See MPEP 2112 (I) & (II). Injecting a second medium into an ejector would increase the flow rate through the ejector. Since the flow area of the ejector remains constant, an increase in the flow rate would result in an increase in the velocity of the media traveling through the ejector, which would produce a lower pressure in the ejector, intensifying the suction effect.

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6. The examiner maintains the previously presented rejections under 35 U.S.C. 103, which are further presented below.

7. Further, the examiner maintains the previously presented double patenting rejections, of which applicant has explained will be addressed at a future date.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1-8 and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman (USPN 1965866) in view of European Document (EP 1179682 A2, hereafter '682) and Morohashi et al. (USPN 6974279).

11. Regarding Claims 1-3, and 10-12, 13, Tolman teaches a method for conveying material by means of a pressure difference in a conveying pipe (18), in which method the material is fed to a conveying pipe (through aperture 20), and further in the conveying pipe to a separator device (10, 17) in which the transferred material is separated from conveying air, in which method

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underpressure is achieved to the conveying pipe with an ejector apparatus (46) the suction side of which is combined with the separator device (10, 17), which ejector apparatus is operated with an actuating medium (steam P2, L123-133). Tolman further teaches a second medium (water) sprayed through nozzles (51) for further cleaning of the air in chamber (10) [P2, L133-139].

Tolman fails to teach that the second medium is brought to the ejector apparatus. '682 teaches an ejector utilizing a second medium (Figure 4, Q3) and a means (10) for feeding the second medium. '682 further teaches that the second medium is a liquid [Para. 9]. Morohashi et al. teaches that air, a gaseous medium may be used instead [C8, L62-65]. It would have been obvious to utilize a second medium to clean the ejector and that the second medium could be a liquid or gas, depending on the application.

12. Regarding Claim 4, Tolman teaches the limitations above, yet fails to teach the proportion of the second medium and the actuating medium is regulated. '682 teaches that the flow rate of Q3 can be set optimally depending on the configuration of the ejector and/or the flow rate of Q2 [Para. 15]. It would have obvious to regulate the proportion of the mediums as taught by '682.

13. Regarding Claims 5-7, Tolman teaches the limitations above, yet fails to teach the how the second medium is sprayed in relation to the ejector device. '682 teaches (Figures 2, 3, and 4) that the second medium can be injected at various locations as desired. It would have been obvious to specify the location of the second medium as required by the application.

14. Regarding Claim 8, Tolman teaches the limitations above, and further teaches an air washing chamber (10) that separates the sprayed water from the gas flow. Tolman fails to teach the second medium, however, '682 teaches the second medium as described above. It would

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have been obvious to separate the second medium from the gas flow in a manner similar to the separation of the water and gas flow as taught by Tolman.

15. Regarding Claims 14, Tolman teaches the limitations above, yet fails to teach a nozzle for bringing the second medium. '682 teaches a nozzle (10) for bringing the second medium. It would have been obvious to use a nozzle to introduce the second medium into the ejector.

16. Regarding Claims 15, 16, 19, and 20, Tolman teaches the limitations above, and further teaches nozzles (51) for spraying water to further yet fails to teach a nozzle for bringing the second medium. '682 teaches the nozzle and further teaches that the second medium can be injected at various locations as described above. It would have been obvious to use a nozzle to spray the second medium and that the nozzle could be placed at a location as required by the application.

17. Regarding Claims 17 and 18, Tolman teaches the limitations above, and further teaches a source for the second medium [P2, L136-L139]. Tolman fails to explicitly teach a pump device or that the device is operated with an actuating medium. However, Tolman teaches the ejector device, which could be considered a pump device. Further, it is known that ejector devices of this type use an actuating medium, and Morohashi et al. teaches that ejector decrease installation costs over vacuum pumps, and that the "plant air" may be used as an actuating medium [C2, L1-7]. It would have been obvious to use a pump device to supply the second medium and that the pump device could have operated with an actuating medium to decrease installation costs as taught by Morohashi et al.

18. Regarding Claim 21, Tolman teaches a means for separating liquid and/or solid matter from the gas flow (10, 17).

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19. Regarding Claim 22, Tolman teaches the limitations above, yet fails to teach a rotating movement in the separating means. Morohashi et al. teaches a cyclone separator (7), the operation of which is well known in the art to produce a rotational movement of the material inside. It would have been obvious achieve a rotating movement inside the separator to facilitate separate of the constituents.

20. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman in view of '682 and Morohashi et al. as applied to claim 1 above, and further in view of Japanese Document (JP 9301504, hereafter '504, abstract provided by applicant).

21. Regarding Claim 9, Tolman in view of '682 and Morohashi teaches the limitations above. Morohashi et al. teaches the intensification of the suction effect by the second medium [C7, L50-C8, L3]. Tolman in view of '682 and Morohashi fails to teach odor elimination. '504 teaches supplying a deodorizing agent (abstract). It would have been obvious to use the second medium to eliminate odors in refuse conveying and to intensify the suction effect.

Double Patenting

22. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

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with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

23. Claims 1-10, 12-14, and 21-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-13, and 19-22 of copending Application No. 10591301. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter of the instant application is fully encompassed by the subject matter of copending Application No. 10591301.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to William R. Harp whose telephone number is (571) 270-5386.

The examiner can normally be reached on Monday - Thursday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/
Supervisory Patent Examiner, Art Unit
3651

/W. R. H./
Examiner, Art Unit 3651